Technical Information PU Hard Foam



Hard PU foam is very versatile in use, e.g. as preformed parts such as outer casings and segments in roller shutter and roller shutter box construction, in domelights, in doors and gates etc. as a door filler, for heat insulation in cooling cells, cold room doors, silos etc.

Hard PU foam has first-class thermal insulation characteristics.

Boards, blanks and preformed parts from hard PU foam are characterised by high compressive strength and low water absorption.

Technical Data:

Basis	hard polyurethane foam, free of CFCs and HCFCs		
Density	$33 \text{ kg} / \text{m}^3$		DIN EN 1602
Fire behaviour	Building Material Class B 2		DIN 4102 - 1
	Fire classification E		EN 13501 – 1
Compressive strength	270 kPa		DIN EN 826
E-Modulus compressive strength	7000 kPa		DIN EN 826
Traverse tensile strength	350 kPa		DIN EN 1607
E-Modulus traverse tensile strength	5000 kPa		DIN EN 1607
Traverse bending strength	320 kPa		DIN EN 12089
Shear strength	120 kPa		DIN EN 12090
Closed-cell content	> 95 %		DIN ISO 4590
Thermal conductivity	measured value at 10 °C	$\lambda_{10} \leq 0.022 \text{ W} / \text{m} \cdot \text{K}$	DIN EN 12667
	rated value	$\lambda = 0.030 \text{ W} / \text{m·K}$	DIN 4108
Water absorption	max. 3 %		DIN EN 12087
Temperature range (continious)	- 80 °C to + 130 °C		

For the density is a tolerance of \pm 10%.

Particular valuation items of strength can undercut the nominal value up to 10 %.

All strength values are based on the parallel test direction.

The values of thermal conductivity are defined in accordance to EN 12667 within 6 weeks at 10°C average temperature.

These specifications only apply to the raw blocks of hard PU foam, not for blanks manufactured from them.

We can process hard PU foam into a wide range of preformed parts with very different shapes; this means that we are able to cut hard PU foam tailored to match your requirements.

Attention! Important Note:

Above information are based on best present knowledge of current technology, but do not guarantee faultless processing of our products. The information is based on practical results of our tests, but is not binding and does not constitute warranties of characteristics in terms of Federal Supreme Court jurisdiction. Our information does not constitute a legally binding assurance of certain properties or suitability for a specific purpose. Supplementary information by our specialists are merely recommendations, for which no liability is accepted.

Due to the many possible applications of our products, we recommend subjecting the project to a thorough suitability test on original materials before release for further application.

Since our information are non-binding we do not warranty their correctness. For this reason we accept no liability for possible improper processing based on information submitted by our employees.

This technical data sheet replaces all previous versions and is valid until a new version is issued, or until Dec. 31, 2024. Please request the latest version after Jan. 01, 2025.

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